CLAIMS

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1. A data displaying device comprising a storage means with data stored therein, a display means for displaying the data and a display control means for controlling display of the data stored in the storage means on the data display means, characterized in that a remark display control means is also provided for displaying a visual confirmation guide for distinguishing a specified area of data being displayed on the display means visually.

2. A data displaying device as defined in claim 1, characterized in that the remark display control means displays the visual confirmation guide superposed on data being displayed on the display means.

3. A data displaying device as defined in claim 1 or 2, characterized in that the remark display control means distinguishes visibility of data being displayed with the visual confirmation guide superposed thereon by deforming the data or adding information thereto and displays the distinguished in visibility data with the superposed visual confirmation guide.

4. A data displaying device as defined in any one of claims 1 to 3, characterized in that the remark display control means moves and displays the visual confirmation guide being displayed.

5. A data displaying device as defined in any one of claims

1 to 3, characterized in that the remark display control means deforms and displays the visual confirmation guide being displayed.

6. A data displaying device as defined in claim 4 or 5, characterized in that the remark display control means simultaneously deforms, moves and display the visual confirmation guide being displayed.

7. A data displaying device as defined in any one of claims 1 to 6, characterized in that the remark display control means, prior to moving and displaying the visual confirmation guide, refers to a preset moving speed and moves and displayed the visual confirmation guide by using the preset moving speed.

8. A data displaying device as defined in any one of claims 1 to 7, characterized in that the remark display control means, prior to moving and displaying the visual confirmation guide, refers to a preset moving distance and deforms and displays the visual confirmation guide by using the preset moving distance.

9. A data displaying device as defined in any one of claims 1 to 8, characterized in that the remark display control means begins moving in a specified direction or deforming the displayed visual confirmation guide being still in stopped or not deformed state or stops moving in the specified direction or deforming the displayed visual confirmation guide being displaced or deformed.

10. A data displaying device as defined in any one of claims

1 to 9, characterized in that the remark display control means erases the visual confirmation guide being displayed.

11. A data displaying device as defined in any one of claims 1 to 10, characterized in that the remark display control means moves or deforms the visual confirmation guide at a speed based on complexity of data being displayed within the visual confirmation guide.

12. A data displaying device as defined in any one of claims 1 to 10, characterized in that the remark display control means moves or deforms the visual confirmation guide at a speed based on frequency of data being displayed within the visual confirmation guide.

13. A data displaying device as defined in any one of claims 1 to 12, characterized in that the remark display control means moves or deforms the visual confirmation guide at a speed based on a combination of the complexity with the frequency of data being displayed within the visual confirmation guide.

14. A data displaying method comprising a data storing step for storing data, a displaying step for displaying the data and a display control step for controlling display of data stored in a data storage means on a data display means, wherein a remark display control step is also provided for displaying a visual confirmation guide for distinguishing a specified area of data being displayed by the displaying step visually.

15. A data storage medium containing a record of data display program readable by a computer to realize a function for

displaying visual confirmation guide using a difference in visibility, a function for distinguishing displayed data by the displayed visual confirmation guide visually and a function for moving or deforming the visual confirmation guide at a speed preset according to complexity or frequency of displayed data to make easier to read the remark displayed data.

16. An electronic book displaying device comprising a storage means with a record of book data, a display means for displaying the book data recorded on the storage means and a page turning means for turning pages of the book data displayed on the display means, characterized in that it is further provided with an environment managing means for managing information for user's reading environment, a second storage means for recording a different viewpoint scene data obtainable by viewing the displayed book data from different view point or mental image data distinguishing the different viewpoint scene data visually, a mental image outputting means and a reading effect control means for outputting reading effect data produced by using the different viewpoint scene data and the mental image data.

17. An electronic book displaying device as defined in claim 1, characterized in that the reading effect control means, prior to outputting reading effect data to display means or the mental image outputting means, controls outputting the reading effect data by referring to user's reading environmental information stored in the environment managing

means.

18. An electronic book displaying device as defined in claim 16 or 17, characterized in that the reading effect control means outputs the reading effect data after a partial or whole book data area corresponding to a mental image data is displayed on the display means.

19. An electronic book displaying device as defined in any one of claims 16 to 18, characterized in that the reading effect control means outputs the reading effect data after the elapse of time specified by a time switching mode in book data.

20. An electronic book displaying device as defined in any one of claims 16 to 19, characterized in that the reading effect control means controls time or a method of outputting the reading effect data by using display mode values preset for respective book data areas into which the book data is divided according to a content or format.

21. An electronic book displaying device as defined in any one of claims 16 to 20, characterized in that the reading effect control means outputs reading effect data by using a reading effect table or a relation graph defining correlation between the reading effect data and reading environment information consisting of user information and psychological information or reading information.

22. An electronic book displaying device as defined in any one of claims 16 to 21, characterized in that the reading effect control means changes a level of outputting mental image data

in a range from a zero to a maximal value in proportion with a psychological value being integrated environmental information of a reader's psychological state.

23. An electronic book displaying device as defined in any one of claims 16 to 22, characterized in that the reading effect control means outputs mental image data in proportion with an amount of page turning motion.

24. An electronic book displaying device as defined in any one of claims 16 to 23, characterized in that the reading effect control means outputs mental image data with corresponding reading effect data superposed thereon when a page contains plural book data areas corresponding to mental image data.

25. An electronic book displaying device as defined in any one of claims 16 to 24, characterized in that the reading effect control means stops outputting a part or whole of reading effect data.

26. An electronic book displaying device as defined in any one of claims 16 to 25, characterized in that a control method of the reading effect control means can be changed by a user.

27. A data storage medium containing a record of book data display program readable by a computer to realize a book data storing function, a display function for displaying stored book data, a page turning function for turning a book data page being displayed on the display means, a environment information managing function for managing information about reader's reading environment, a second storing function for storing a

different viewpoint scene data obtainable by viewing the displayed book data from different viewpoint or mental image data, a mental image outputting means and a reading effect control means for outputting reading effect data produced by synthesizing the different viewpoint scene data with the mental image data.

28. A data storage medium with display data recorded thereon, wherein the display data is recorded by every specified unit and provided each with information for scroll display on a display screen.

29. A data storage medium with display data recoded thereon as defined in claim 28, characterized in that the specified unit of recorded display data is a page.

30. A data storage medium with display data recorded thereon as defined in claim 28, characterized in that the information for scroll display includes information scrolling display data in different directions.

31. A data storage medium with display data recorded thereon as defined in claim 28, characterized in that the information for scroll display includes information for linking with information for another scroll display.

32. A data storage medium with display data recorded thereon as defined in claim 28, characterized in that the information for scroll display includes information on a scroll display speed.

33. A data storage medium with display data recorded thereon

as defined in claim 28, characterized in that the information for scroll display includes information for specifying a scroll display area.

34. A data storage medium with display data recorded thereon as defined in claim 28, characterized in that the information for scroll display includes information for specifying a scale of enlargement or reduction of a display area for scroll display.

35. A data storage medium with display data recorded thereon as defined in claim 28, characterized in that the information for scroll display includes synchronous reproduction information for specifying a display data content to be reproduced in synchronism with scroll display.

36. A displaying device for reproducing and displaying the storage medium with display data recorded thereon as defined any one of claims 28 to 35, which performs scroll display based on the information for scroll display.

37. A displaying device as defined in claim 36, characterized in that it is provided with a scroll indicating means for scroll display.

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